

## QUESTIONS AND ANSWERS FOR COMPOSTING FACILITIES

#0496

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**Q. Is composting an exact science?**

A. No, to the contrary, composting is a very flexible process. It happens over a broad range of conditions, but the closer to the preferred range you stay, the less likely you will encounter odors or anaerobic conditions.

**Q. What are the biggest problems associated with composting?**

A. ODORS are the number one threat to your composting operation, followed by ammonia lost from high-Nitrogen materials, and lastly, anaerobic conditions within windrows and piles.

**Q. If I have an odor problem, should I reduce the turning frequency?**

A. This will only compound the problem later. You should turn MORE frequently early in the process. If odors still persist, you should consider changing the recipe, discontinue using the odorous raw material, or use another composting method.

**Q. Can I compost year-round?**

A. Yes, but seasonal and weather variations call for operational adjustments. Cold weather slows the process, so combine piles or enlarge windrows. Warm weather may require water additions to windrows or piles. Rain can cause extreme moisture, run-off, and puddles so be sure to have good drainage on the site.

**Q. What tools are essential to monitoring the compost process?**

A. A temperature sensor (thermometer) and your nose. Low temperatures are a sign of reduced aerobic microbial activity. High temperatures (beyond 140EF) may produce odors and call for turning or aeration.

**Q. Can constant exposure to composting make me sick?**

A. Some people may be exceptionally sensitive to some of the organisms in compost, especially *Aspergilles fumigatus*. Hand washing before touching eyes, food and so on is important. Disposable dust masks can be worn, particularly under dry and dusty conditions.

**Q. Is curing really that important in the process?**

A. Curing is a very critical stage that occurs at low, mesophilic temperatures. A long curing period may overcome the shortcomings of the composting method. Immature compost may contain high levels of organic acids, and a high C:N ratio that can damage certain horticultural applications. Positive effects of curing include humus and re-colonization of the pile by soil microorganisms.

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**Q. Can I use my compost for livestock bedding or as a litter ingredient for floor-managed poultry operations?**

A. Yes, because it has a high moisture-holding capacity, reduced pathogen level, and is easy to handle. Be sure that the compost is stable and carries a moisture content no greater than 50% and no less than 35%. Use it as a supplement to existing bedding for best results.

**Q. Who will be potential buyers of my high quality compost?**

A. Some of the most common buyers include landscapers, commercial nurseries, home and garden centers, golf courses, fruit and vegetable farmers, turf growers, and organic farmers. Other specialized buyers may include land-reclamation contractors, cemeteries, discount stores, or lumber/hardware outlets.

**Q. What are some of the benefits of compost?**

A. The addition of compost to soils reduces the bulk density, improves the aeration and drainage of dense soils, increases the nutrient availability, suppresses disease-causing organisms, and has a pH near neutral which is good for most agricultural crops.

**Q. How much land will I need for composting?**

A. The amount of land required for composting will ultimately depend on the amount of material (feedstocks and bulking agents) that you wish to compost. The composting facility should have enough space to allow for equipment access (such as windrow turners), have a suitable slope for proper drainage, and meet the siting requirements for distance from water wells, domiciles, etc.

**Q. What are the costs involved in a composting operation?**

A. It will depend on a large number of variables, such as costs of labor, fuel, land, equipment, and marketing of the finished compost, interest rates, and credit terms. Other factors include distance to off-farm sources of raw materials and the distances on-farm materials must be moved.

For more information about solid waste issues and composting, please contact your local Health Department, Ohio EPA District Office, or the **Composting Unit** in Ohio EPA Central Office at (614) 644-2621.

Ohio EPA District Offices:

**Northeast Ohio:**

330-963-1200

**Northwest Ohio:**

419-352-8461

**Central Ohio:**

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